REMARKS

The present Amendment amends claims 1-8 and 20-23, cancels claims 9-13, 15, 16 and 24, leaves claim 23 unchanged and adds new claims 25-31. Therefore, the present application has pending claims 1-8, 20-23 and 25-31.

Claims 1-7, 9-13, 15, 20 and 21 stand rejected under 35 USC §103(a) as being unpatentable over Hirose (U.S. Patent Application Publication No. 2001/0049825) in view of Shimadoi (U.S. Patent No. 6,400,729) further in view of Funaya (U.S. Patent No. 6,263,393); claims 8, 22 and 23 stand rejected under 35 USC §103(a) as being unpatentable over Hirose, in view of Funaya and further in view of Tsao (U.S. Patent No. 6,862,274); and claim 16 stands rejected under 35 USC §103(a) as being unpatentable over Hirose in view of Shimadoi and further in view of Yoshizawa (U.S. Patent No. 6,944,169). As indicated above, claims 9-13, 15, 16 and 24 were canceled. Therefore, the above noted rejections with respect to claims 9-13, 15, 16 and 24 are rendered moot. Accordingly, reconsideration and withdrawal of the above rejections of claims 9-13, 15, 16 and 24 is respectfully requested.

These rejections with respect to the remaining claims 1-8 and 20-23 are traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in 1-8 and 20-23 are not taught or suggested by Hirose, Shimadoi, Funaya, Tsao and Yoshizawa whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

Amendments were made to the claims to more clearly describe features of the present invention as recited in the claims. Particularly,

amendments were made to the claims to recite that the present invention is directed to an address translator that not only translates a Layer 3 address described in a Layer 3 header of communication data between a first addressing system and a second addressing system but also detects the communication data conforming to a particular protocol based on information on a port number and creates translation information including a correspondence relationship between the first addressing system and the second addressing system for translating a Layer 3 address described in the region higher than Layer 3 of the communication data when detecting a communication conforming to the particular protocol.

According to the present invention, the address translator can efficiently detect the communication data having the Layer 3 address described in the region higher than Layer 3 which should be translated.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references whether said references are taken individually or in combination with each other. Particularly, the above described features of the present invention are not taught or suggested by Hirose, Funaya, Tsao or Yoshizawa whether said references are taken individually or in combination with each other as suggested by the Examiner.

Hirose teaches a network device which is connectable to a network for use in directing data. In Hirose, the network device executes a receiving process by receiving data having a physical address indicating a destination of the data, comparing the physical address of the received data which registers physical addresses, completing the receiving process when the

physical address of the received data matched with one of the registered physical addresses and canceling the receiving process. Further, Hirose teaches that the network device executes a transmission process by detecting a destination of data to be transmitted, selecting one of the registered physical addresses according to the detected destination of the data to be transmitted and attaching the selected physical address to the data thereby indicating an origin of the data.

Hirose teaches specifically the translation of a Media Access Control (MAC) address which is a unique identifier of a network device as implemented on Layer 2 of the OSI model. Thus, Hirose does not teach or suggest the translation of a Layer 3 address nor translation of a layer address of Layer higher than Layer 3 as in the present invention as recited in the claims.

In the Office Action the Examiner alleges without support that Hirose discloses a detecting function for detecting a communication conforming to a particular protocol based on information on a port. However, Hirose only discloses that the network device comprises a network interface having a first physical address and second physical address and when the network device receives the data, the network device detects the destination physical address for deciding from which port the received data are sent. Hirose does not in any way teach or suggest as alleged by the Examiner a detecting function for detecting a communication conforming to a particular protocol based on information on a port. Hirose discloses the translation of MAC address which is the information of Layer 2 but does not disclose the translation of Layer 3 address or Layer 3 address described in a region higher than Layer 3.

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Thus, Hirose fails to teach or suggest <u>an address translating function</u> <u>for translating a Layer 3 address conforming to the first addressing system to</u> <u>a Layer 3 address conforming to the second addressing system, or vice versa</u> <u>and a detecting function for detecting communication data conforming to a</u> <u>particular protocol based on at least information on a port number contained</u> <u>in a header of the communication data</u> as recited in the claims.

Further, Hirose fails to teach or suggest that the <u>address translator</u> <u>translates, by said address translation function, a Layer 3 address described</u> <u>in a Layer 3 header of the communication data, and that when said address</u> <u>translator detects said communication data conforming to said particular</u> <u>protocol, said address translator creates translation information including a</u> <u>correspondence relationship between a Layer 3 address in the first</u> <u>addressing system and a Layer 3 address in the second addressing system</u> <u>for translating a Layer 3 address described in a region higher than Layer 3 of</u> <u>the communication data</u> as recited in the claims.

The above described deficiencies of Hirose are not supplied by any of the other references of record. Particularly, the above described deficiencies of Hirose are not supplied by Shimadoi, Funaya, Tsao or Yoshizawa whether said references are taken individually or in combination with Hirose as suggested by the Examiner in the Office Action. Therefore, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Hirose whether taken individually or in combination with any one or more of Shimadoi, Funaya, Tsao or Yoshizawa.

In the Office Action the Examiner recognizes various deficiencies of Hirose. One of the deficiencies the Examiner recognizes is that Hirose does

"explicitly disclose address translator translates, by said address translator function, an address of the communication data to a Layer 3 address corresponding to the Open System Interconnection (OSI) Model; address translation function, an address of the communication data to a higher layer address corresponding to a Layer higher than Layer 3 of the OSI model. This deficiency of Hirose as recognized by the Examiner is alleged by the Examiner as being taught by Funaya.

Further, in the Office Action the Examiner recognizes that Hirose does "explicitly disclose header of communication data and the first and second portions of the communication data" and that such deficiency is allegedly taught by Funaya.

Numerous ones of the above described deficiencies of Shimadoi and Funaya are also evident in Tsao and Yoshizawa

Applicants submit that the disclosures of each of Shimadoi, Funaya, Tsao and Yoshizawa being relied upon by the Examiner to supply the known deficiencies of Hirose is in error and in fact, such disclosures do not teach or suggest the matter being relied upon.

However, even if such matter is taught by Shimadoi, Funaya, Tsao and Yoshizawa as alleged by the Examiner there is no teaching or suggestion in any of said references of the above described deficiencies of Hirose, particularly as it relates to an address translator that not only translates a Layer 3 address described in a Layer 3 header of communication data between a first addressing system and a second addressing system but also detects the communication data conforming to a particular protocol based on information on a port number and creates translation information including a

correspondence relationship between the first addressing system and the second addressing system for translating a Layer 3 address described in the region higher than Layer 3 of the communication data when detecting a communication conforming to the particular protocol.

According to the present invention, the address translator can efficiently detect the communication data having the Layer 3 address described in the region higher than Layer 3 which should be translated.

Thus, Shimadoi, Funaya, Tsao and Yoshizawa, the same as Hirose, each fails to teach or suggest an address translating function for translating a Layer 3 address conforming to the first addressing system to a Layer 3 address conforming to the second addressing system, or vice versa and a detecting function for detecting communication data conforming to a particular protocol based on at least information on a port number contained in a header of the communication data as recited in the claims.

Further, Shimadoi, Funaya, Tsao and Yoshizawa, the same as Hirose, each fails to teach or suggest that the address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data, and that when said address translator detects said communication data conforming to said particular protocol, said address translator creates translation information including a correspondence relationship between a Layer 3 address in the first addressing system and a Layer 3 address in the second addressing system for translating a Layer 3 address described in a region higher than Layer 3 of the communication data as recited in the claims.

Therefore, since each of Hirose, Shimadoi, Funaya, Tsao and Yoshizawa suffers from the same deficiencies relative to the features of the present invention as now more clearly recited in the claims, combining Hirose with any one or more of Shimadoi, Funaya, Tsao and Yoshizawa, does not render obvious the claimed invention. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 1-7, 9-13, 15, 20 and 21 as being unpatentable over Hirose in view of Shimadoi and further in view of Funaya; reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 8, 22 and 23 as being unpatentable over Hirose, in view of Funaya and further in view of Tsao; and reconsideration and withdrawal of the 35 USC §103(a) rejection of claim 16 as being unpatentable over Hirose in view of Shimadoi and further in view of Yoshizawa are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-8, and 20-23.

As indicated above, the present Amendment adds new claims 25-31. New claims 25-31. New claims 25-31 recite many of the same features shown above to not be taught or suggested by the references of record. Therefore, the same arguments presented above with respect to claims 1-8 and 20-23 apply as well to claims 25-31.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-8, 20-23 and 25-31 are in condition for allowance. Accordingly, early allowance of claims 1-8, 20-23 and 25-31 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection

with the filing of this paper, including extension of time fees, or credit any

overpayment of fees, to the deposit account of MATTINGLY, STANGER,

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Respectfully submitted,

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